

**Voyager 1 Post-Saturn Encounter Sequence Of
Events Collection, 1983-1984
2 cubic feet
JPL 107**

History

The collection includes data from Voyager 1 Sequence of Events (SOE) Integrated Timeline Project from 1983-1984.

Voyager 1 was launched on September 5, 1977. It flew by Jupiter and then Saturn on November 12, 1980; Voyager 1's trajectory, designed to send the spacecraft close past Saturn's large moon Titan and behind Saturn's rings, also bent the spacecraft's path out of the ecliptic plane and led into interstellar space with no further planetary encounters.

Voyager 1 was equipped with instruments to conduct 10 different experiments. The instruments include television cameras, infrared and ultraviolet sensors, magnetometers, plasma detectors, and cosmic-ray and charged-particle sensors. In addition, the spacecraft radio is used to conduct experiments.

The SOE during this one-year period of time includes data from Voyager's Infrared Interferometer Spectrometer (IRIS) for the Derived Atmospheric Parameters for Saturn Planetary Data System (PDS). The data sets were derived from measurements obtained during north/south mapping sequences in which the planet was mapped in the latitude range of approximately 60 degrees South and 60 degrees North.

Another data set returned by Voyager 1 was its Ultraviolet Spectrometer Subsystem 3 Reduced Data Record (RDR). RDR is a product that has been reformatted from the raw data counts during the Saturn encounter phase into standard units like degrees or meters. Original instrument data were merged with ancillary data from footprint Supplementary Experiment Data Record (SEDR) provided by the Voyager Project. The final product files are formatted as Planetary Data System (PDS) binary tables. These readings are channeled through the Deep Space Network and on to JPL as a timed SOE data count of the Voyager 1 Post-Saturn Encounter.

Provenance

Marian Rudnyk, Section 384, Image Processing Applications and Development, transferred the collection to the Archives in 1992.

Collection Description and Arrangement

The collection consists of Sequence of Events Integrated Timeline data and flight SOE, with each reading assigned a Ground Command File (GCMD) tape number. The collection is arranged chronologically while maintaining existing binder/folder labeling.

In some instances this chronological sequence duplicates the title. However, sequenced identification numbers are located on each folder as the main identifiable sequence arrangement. Attached to the face of several of the data readings are cover pages indicating the sequence identification, date of release, execution period, GCMD tape number and the person or persons who prepared these SOE's.

Conservation/Preservation

Standard preparations of documents for long term storage were completed.

Separation Statement

No materials were separated from the collection. However, several of the original listed SOE data do not have identifiable cover pages.

Finding Aids

The uniformity of the collection basically is self-indexing; there are no other finding aids.

File Folder List

File titles were retained as found, with dates and sequence identification number.

Box 1

- Fld 1 A615. Integrated Timeline Preliminary S/C1 (FINAL). Prepared by: Robert Barry, Ray B. Morris, 4-12-83
- Fld 2 A615. Voyager Sequence Team Integrated Package Delivery Prepared by: Robert Barry, 5-16-83
- Fld 3 A615. Flight Sequence of Events for JST. Prepared by: E. Erwin, 5-16-83
- Fld 4 A616. Voyager Integrated Timeline Preliminary (FINAL). Prepared by: Herman Hielscher, Robert Barry, 7-7-83
- Fld 5 A616. Voyager Sequence Team Integrated Package Delivery. Prepared by: Herman Hielscher, 7-27-83
- Fld 6 A616. Voyager Flight Sequence of Events. Prepared by: E. Erwin, 8-8-83

Box 2

- Fld 7 A617. Voyager Sequence Request. Prepared by: Omer Divers, 8-12-83
- Fld 8 A617. Voyager Flight Sequence of Events (SOE). Prepared by: E. Erwin, 11-7-83
- Fld 9 A617. Voyager Integrated Timeline Preliminary (FINAL). Prepared by: Robert Barry, Ray B. Morris, 10-3-83
- Fld 10 A617. Voyager Sequence Team Integrated Package Delivery Prepared by: Robert Barry, 11-7-83
- Fld 11 A617G. Voyager Final ESF (Event Sequence File). Prepared by: Robert Barry, 11-2-83
- Fld 12 A617. Voyager Flight Sequence of Events. Prepared by: Ellen Erwin, Edward L. Dunbar Jr., 11-7-83
- Fld 13 A618N. Voyager Final ESF (Event Sequence File). Prepared by: Robert Barry, 1-27-84

Box 3

- Fld 14 A618. Voyager Integrated Timeline Preliminary S/C1 (FINAL). Prepared by: Robert Barry, Ray B. Morris, 1-5-84
- Fld 15 A618PA. Voyager Sequence Team Integrated Package Delivery. Prepared by: Robert Barry, 2-6-84
- Fld 16 A618. Voyager Flight Sequence of Events (SOE) Prepared by: Ellen Erwin, 2-6-84
- Fld 17 A619. Voyager Integrated Timeline Preliminary S/C1 Prepared by: Robert Barry, Ray B. Morris, 3-7-84
- Fld 18 A619I. DTRMAP (Digital Tape Recorder) and Index. Prepared by: L. Zottarelli, 4-20-84

Fld 19 A619F. Voyager Final ESF (Event Sequence File). Prepared by: Robert Barry,, 4-19-67

Fld 20 A619. Voyager Flight Sequence of Events (SOE) Preliminary. Prepared by: Ellen Erwin, 4-23-84

Box 4

Fld 21 A619. Voyager Flight Sequence of Events (SOE). Prepared by: Ellen Erwin, 4-27-84

Fld 22 A619 Voyager Integrated Timeline Preliminary S/C1 (FINAL) Prepared by: Robert Barry, Ray B. Morris, 3-7-84

Fld 23 A619 Voyager Sequence Team Integrated Package Delivery Prepared by: Robert Barry, 4-30-84

Fld 24 A619 Voyager Flight Sequence of Events (SOE) Prepared by: Ellen Erwin, 4-27-84

Fld 25 A620. Voyager Integrated Timeline Preliminary S/C1 (FINAL) Prepared by: Herman Hielscher, 6-27-84

Box 5

Fld 26 A620. Voyager Integrated Timeline Preliminary S/C1 Prepared by: Herman Hielseher, Ray B. Morris, 6-22-84

Fld 27 A620. Voyager Flight Sequence of Event (SOE) Prepared by: Ellen Erwin, 7-24-84

Fld 28 A620. Voyager Flight Sequence of Event (SOE) (cont. of Fld 27) Prepared by: Ellen Erwin, 7-24-84

Fld 29 A622. Voyager Integrated Timeline Preliminary S/C1 (FINAL) Prepared by: Michael K. Jones, Ray B. Morris, 12-7-84

Box 6

Fld 30 A622. Voyager Flight Sequence of Events (SOE) Prepared by: Ellen Erwin, 1-22-85

Fld 31 A622. Voyager Flight Sequence of Events (SOE) (cont. of Fld 30) Prepared by Ellen Erwin,1-22-85

Catalog Description

Voyager 1 Post -Saturn Encounter Sequence of Events Collection, 1983-1984.

2.0 c.f. in 31 folders

Includes Sequence of Events Integrated Timeline data concerning the Voyager 1 Saturn encounter created by Sequence Integration Engineers and Team Chiefs who were members of the JPL Project Test and Operations Section and Mission Design Section.

The data was recorded between 1983 and 1984 in support of various experiments and Timeline readings of Saturn conducted by Voyager 1.

Register available in the repository.

Tracings

Jet Propulsion Laboratory-History

Voyager 1 - Saturn Encounter

Voyager 1 - Data Processing and Operations

Accession 92-51